

**In the Claims:**

1. (Currently Amended) A method of transforming a wireless network, the method comprising:

using a computer system for determining a subscriber profit proxy for a plurality of subscribers in the wireless ~~network~~; network, the wireless network comprising multiple cell sites, each cell site having a coverage area divided into sectors, each sector having at least one cell site antenna serving that sector, the wireless network thereby comprising multiple sectors;

using the computer system for determining a number of minutes of use over a period of time for one or more of the subscribers;

using the computer system for determining a service quality metric for one or more sectors in the wireless network;

using the computer system for determining an investment return per sector for ~~the one or more of the sectors~~; sectors in the wireless network, wherein the investment return is based upon the subscriber profit proxy for the plurality of subscribers, the number of minutes of use over the period of time for the one or more of the subscribers, and the service quality metric for the one or more sectors in the wireless network; and

selecting one of ~~the sectors in~~ the wireless network sectors for capital investment, the selecting based at least in part on the investment return per sector.

2. (Original) The method of claim 1, wherein the subscriber profit proxy is based at least in part on revenue collected from the subscriber, an expected number of months under a contract, an acquisition cost, and a service delivery cost.

3. (Previously Presented) The method of claim 2, wherein the subscriber profit proxy (SPP) value is determined at least in part by the equation:

$$SPP_i = V_i * M_i - A_i - S_i$$

wherein

$V_i$  is the revenue per month for subscriber I;

$M_i$  is the expected months under contract for subscriber I;

$A_i$  is the acquisition cost for subscriber I; and

$S_i$  is the service delivery cost for subscriber I.

4. (Previously Presented) The method of claim 1, wherein the minutes of use over the period of time is based on call detail records collected during peak usage periods.
5. (Original) The method of claim 1, wherein the service quality metric comprises a dropped call rate for each sector.
6. (Original) The method of claim 5, wherein the dropped call rate is determined from call detail records collected from each sector.
7. (Previously Presented) The method of claim 1, wherein the determining the investment return comprises:
- determining a profit per sector;
  - determining a dropped-call rate per sector;
  - determining an investment needed per sector to reduce dropped calls in each

sector; and

determining the investment return per sector based at least in part on the profit per sector, the dropped-call rate per sector, and the investment needed per sector to reduce dropped calls in each sector.

8. (Previously Presented) The method of claim 7, wherein the determining the profit per sector is performed in accordance with the equation:

$$P_k = \sum_i \left[ SPP_i * \frac{MOU_{ik}}{\sum_j MOU_{ij}} \right]$$

wherein

k represents a sector;

I represents a subscriber;

P<sub>k</sub> is the profit for sector k;

SPP<sub>i</sub> is the subscriber profit proxy value for subscriber I;

MOU<sub>ik</sub> is the minutes of use for subscriber I in sector k; and

∑<sub>j</sub>MOU<sub>ij</sub> is a sum of the minutes of use for subscriber I in all sectors.

9. (Currently Amended) The method of claim 7, wherein the determining the investment return of a per sector is performed in accordance with the equation:

$$R_k = P_k + D_k - I_k$$

wherein

$k$  represents a sector;

$P_k$  is the profit for sector  $k$ ;

$D_k$  is the drop-call rate for sector  $k$ ; and

$I_k$  is investment needed to investment needed to reduce dropped calls in sector  $k$ .

10. (Currently Amended) The method of claim 1, wherein the selecting ~~the one of the~~ wireless network sectors for ~~the~~ capital investment is performed at least in part by prioritizing the sectors based upon the investment return determined for each respective sector.

11-21. (Canceled)

22. (Currently Amended) A computer program product for analyzing ~~a capital investment in~~ a wireless network, the computer program product having a non-transitory computer-readable medium with a computer program embodied thereon, the computer program product comprising:

computer program code for determining a subscriber profit proxy for a plurality of subscribers in the wireless ~~network~~; network, the wireless network comprising multiple cell sites, each cell site having a coverage area divided into sectors, each sector having at least one cell site antenna serving that sector, the wireless network thereby comprising multiple sectors;

computer program code for determining a number of minutes of use over a period

of time for one or more of the subscribers;

computer program code for determining a service quality metric for one or more sectors in the wireless network;

computer program code for determining an investment return per sector for the one or more ~~sectors~~, sectors in the wireless network, wherein the investment return is based upon the subscriber profit proxy for the plurality of subscribers, the number of minutes of use over the period of time for the one or more of the subscribers, and the service quality metric for the one or more sectors in the wireless network; and

computer program code for identifying one of the wireless network sectors for ~~the~~ capital investment, the identifying based at least in part on the investment return ~~for the one or more sectors~~, per sector.

23. (Original) The computer program product of claim 22, wherein the computer program code for determining a subscriber profit proxy includes computer program code for including revenue collected from the subscriber, an expected number of months under a contract, an acquisition cost, and a service delivery cost.

24. (Previously Presented) The computer program product of claim 22, wherein the computer program code for determining a subscriber profit proxy (SPP) value includes computer program code for performing the equation:

$$SPP_i = V_i * M_i - A_i - S_i$$

wherein

$V_i$  is the revenue per month for subscriber  $i$ ;

$M_i$  is the expected months under contract for subscriber  $I$ ;

$A_i$  is the acquisition cost for subscriber  $I$ ; and

$S_i$  is the service delivery cost for subscriber  $I$ .

25. (Previously Presented) The computer program product of claim 22, wherein the minutes of use over the period of time is based on call detail records collected during peak usage periods.
26. (Original) The computer program product of claim 22, wherein the computer program code for determining a service quality metric includes computer program code for determining a dropped call rate for each of the one or more sectors.
27. (Original) The computer program product of claim 26, wherein the dropped call rate is determined from call detail records collected from each of the one or more sectors.
28. (Previously Presented) The computer program product of claim 22, wherein the computer program code for determining the investment return comprises:
- computer program code for determining a profit per sector;
  - computer program code for determining a dropped-call rate per sector;
  - computer program code for determining an investment needed per sector to reduce dropped calls in each sector; and
  - computer program code for determining the investment return per sector based at least in part on the profit per sector, the dropped-call rate per sector, and the investment needed per sector to reduce dropped calls in each sector.

29. (Previously Presented) The computer program product of claim 28, wherein the computer program code for determining the profit per sector includes computer program code to perform the equation:

$$P_k = \sum_i \left[ SPP_i * \frac{MOU_{ik}}{\sum_j MOU_{ij}} \right]$$

wherein

k represents a sector;

i represents a subscriber;

P<sub>k</sub> is the profit for sector k;

SPP<sub>i</sub> is the subscriber profit proxy value for subscriber i;

MOU<sub>ik</sub> is the minutes of use for subscriber i in sector k; and

∑<sub>j</sub>MOU<sub>ij</sub> is a sum of the minutes of use for subscriber i in all sectors.

30. (Currently Amended) The computer program product of claim 29, wherein the computer program code for determining the investment return of a per sector includes computer program code for performing the equation:

$$R_k = P_k + D_k - I_k$$

wherein

k represents a sector;

$P_k$  is the profit for sector  $k$ ;

$D_k$  is the drop-call rate for sector  $k$ ; and

$I_k$  is investment needed to investment needed to reduce dropped calls in sector  $k$ .

31. (Currently Amended) The computer program product of claim 22, wherein the computer program code for identifying one of the wireless network sectors for the capital investment includes computer program code for prioritizing the sectors based upon the investment return determined for each respective sector.

32-42. (Canceled)

43. (Currently Amended) The method of claim 1, further comprising:  
deploying additional equipment to a base transceiver station (BTS) serving the one of the sectors, based at least in part on the selecting ~~the~~ one of the wireless network sectors for ~~the~~ capital investment.

44. (Previously Presented) The method of claim 43, wherein the additional equipment is selected from the group consisting of: a radio tower, an antenna, a radio, a cable, and combinations thereof.

45-52. (Canceled)



53. (Currently Amended) The method of claim 1, wherein the selecting ~~the~~ one of the wireless network sectors for capital investment further comprises selecting more than one of the wireless network sectors ~~in the wireless network~~ for capital investment.

54. (Currently Amended) The method of claim ~~[[53,]]~~ 1, wherein the one of the wireless network sectors is served by a first base transceiver station (BTS) in the wireless network, and wherein the selecting ~~the~~ one of the wireless network sectors for capital investment further comprises selecting all sectors served by the first BTS for capital investment.

55. (Previously Presented) The computer program product of claim 22, further comprising computer program code for identifying additional equipment to deploy to a first base transceiver station (BTS) serving the one of the wireless network sectors.

56. (Previously Presented) The computer program product of claim 55, wherein the additional equipment is selected from the group consisting of: a radio tower, an antenna, a radio, a cable, and combinations thereof.

57. (Currently Amended) The computer program product of claim 22, wherein the computer program code for identifying one of the wireless network sectors for ~~the~~ capital investment further comprises computer program code for identifying more than one of the wireless network sectors for capital investment.

58. (Currently Amended) The computer program product of claim ~~[[57,]]~~ 22, wherein the one of the wireless network sectors is served by a first base transceiver

station (BTS) in the wireless network, and wherein the computer program code for identifying the one of the wireless network sectors for capital investment further comprises computer program code for identifying all sectors served by the first BTS for capital investment.